

3030/24



Division of Water
Commercial and Government Services Section

Department of Natural Resources
and Environmental Control
89 Kings Hwy
Dover, DE 19901
dnrec.delaware.gov

Phone: (302) 739-9946
Fax: (302) 739-8369

INSTRUCTIONS FOR COMPLETING THE PERMIT APPLICATION FOR THE CONSTRUCTION OF WASTEWATER COLLECTION AND CONVEYANCE SYSTEMS

The following items must accompany the application. **Please note that incomplete application packages will be returned in their entirety and not reviewed until such time as all required information is received.**

- 1. A narrative summary of the intended purpose and design of the proposed facilities.
- 2. One (1) set of final construction plans and specifications, if applicable, signed and sealed by a Delaware-registered Professional Engineer, or a Delaware-registered Professional Land Surveyor for gravity systems only. One (1) electronic copy of final Plans.
- 3. One (1) electronic copy of final Plans.
- 4. The final plans must be drawn to scale showing slopes, inverts, pipe types and sizes, existing and proposed ground surfaces, tops of manholes, water lines, stormwater and stream crossings, encasements shown in plan and profile, and other information if pertinent or requested.
- 5. For pump/lift stations and force mains, include all calculations and pump/performance curves.
- 6. A check made payable to the State of Delaware for eight hundred twenty-five dollars (\$825.00), the non-refundable permit review fee. This fee covers the initial review and one follow-up review of any corrections or changes made to address the Division's comments. An additional eight hundred twenty-five dollars (\$825.00) non-refundable review fee must be submitted for resubmission of the plans if changes are made to the project which trigger a complete review of the permit application.
- 7. Your permit will have a public notice requirement if your system includes force mains or pump/lift stations. Include a check made payable to the State of Delaware for three hundred dollars (\$300.00) for the reimbursement of legal notices if the system has a force main connection or a pump/lift station.
- Please submit the completed application package, as outlined above, to DE DNREC, Division of Water, Commercial and Government Services Section, 89 Kings Highway, Dover, DE 19901. Please note, a new application, including the review fee, must be submitted if the Division's comments are not addressed or if requested supplemental information is not provided within one (1) year of the comment or request date.
- The following items must be submitted prior to permit issuance:
 - 8. Verification from the appropriate county or municipal planning authority that the project has the proper zoning approval.
 - 9. A letter from the owner/operator of the wastewater facilities to which the proposed collection and conveyance facilities connect. The letter must include confirmation that the owner/operator has approved the project, that the owner/operator will take responsibility for treating and disposing of the wastewater to be conveyed and that the downstream facilities have the capacity to manage the additional flows without causing or contributing to violations of Delaware's Environmental Protection Act (7 Del. C., Chapter 60) and the regulations promulgated thereafter. This includes, but is not limited to, unauthorized discharges such as overflows at manholes and violations of the treatment system's operating permit (for example, the National Pollutant Discharge Elimination System (NPDES) permit).

- Visit us on the web at: <https://dnrec.alpha.delaware.gov/water/surface-water/>

**APPLICATION FOR THE CONSTRUCTION OF
WASTEWATER COLLECTION AND CONVEYANCE SYSTEMS**

Application must be complete, typewritten or clearly printed

Date Application Submitted 4-26-24

PROJECT INFORMATION			
Project Name and Location/ Address Azalea Woods Phase 3 Gravel Hill Road & Shingle Point Road			
Tax Parcel Number(s) 135-11.00-49.00			
County <input type="checkbox"/> Kent <input type="checkbox"/> New Castle <input checked="" type="checkbox"/> Sussex		Watershed (www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessment.aspx) <input type="checkbox"/> Chesapeake Bay <input type="checkbox"/> DE Bay/Estuary <input checked="" type="checkbox"/> Inland Bays/Atl Ocean <input type="checkbox"/> Piedmont	
Sewer District or Interceptor		Wastewater Treatment/Disposal Facility Name	
Coordinated CPCN Areas		Beaver Creek Wastewater Treatment Facility	
Anticipated Construction Start Date 3-1-25		Treatment/Disposal Facility Owner and Operating Permit Number Artesian/202902-OP	
Please note, construction permits expire three (3) years from the date of permit issuance.			
Are you requesting <u>plan review and comment</u> or WPC Construction Permit issuance? (circle one)			
Design Flow (gallons/day) Average 69,120		Peak 276,480	Peak Factor 4.00
		Basis of Design 240 GPD/EDU	
Description			
OWNER/DEVELOPER			
Company Name Azalea Woods LLC			
Mailing Address 506 Main Street			
City Gaithersburg		State MD	Zip 20878
Contact Name Tommy Natelli			
E-Mail Address tommy@natelli.com			
Telephone 301-670-4020		Cell	Fax

ENGINEER					
Company Name Solutions IPEM					
Mailing Address 303 North Bedford Street					
City Georgetown		State DE		Zip 19947	
Contact Name Jason Palkewicz, PE					
E-Mail Address jpalkewicz@solutionsipem.com					
Telephone 302-297-9215		Cell		Fax	
GRAVITY SEWER INFORMATION					
Ownership <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private	Type of Sewer System <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other?			If Other, list below	
Type of Pipe	Length (ft)	Diameter (in)	Joint Specification	Min. Slope (ft/ft)	Min. Velocity (ft/sec)
DIP	2397	8 & 10	Wall Bell & Spigot	0.28(8") & 0.22(10")	2.0
PVC	3685	8	Wall Bell & Spigot	0.28	2.0
Minimum Pipe Cover (ft) 4.0	Number of Manholes 26	Drop manholes provided? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Maximum Distance Between Manholes (ft) 335	
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			If not, explain provisions to prevent cross-contamination:		
Explain any special challenges (for example, stream, highway and/or railroad crossings, directional drilling, elevated sewers, etc.)					
Comments					

PUMP/LIFT STATION INFORMATION				
Ownership <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private		Type of Wastewater <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other?		If Other, list below
Pump Station Flows (gallons/day) Design 69,120			Average 69,120	Peak 276,480
			Peak Factor 4.00	
Basis of Design 240 GPD/EDU			Pump Type Non-clog	
Will peak flows be accommodated if largest unit fails? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Pump calc's and pump curves attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Cycle Time (minutes)	Wet Well Detention Time (minutes)
Check valves provided on discharge line? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			Gate valves provided on discharge line? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
If not, explain alternate procedure:				
Ventilation provided in wet well? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Dry Well? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Is an alarm system included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Alternate source of power? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
What other provisions for emergency operations?				
Height of Influent Above Pump (suction head) (ft) 6.5		Height of Effluent Above Pump (discharge head) (ft) 18.62		Friction Loss (ft) 76.39
Pump Design Point 192 GPM@ 100.4 FT	Pump Operating Point 200 GPM@ 107 FT	Static Head (ft) 24	Total Head (ft) 100.4	Required Motor Horsepower (hp) 11
FORCE MAIN INFORMATION				
Type of Pipe PVC		Length (ft) 2343		Diameter (in) 4
Hazen-Williams "C" Design Factor 150	Type of Joints ASTM D3139	Velocity Under Design Conditions (ft/sec) 2.0	Minimum Pipe Cover (ft) 4.0	
Air relief valves specified? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Clean-outs provided? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Maximum distance between clean-outs (ft)		
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		If not, explain provisions to prevent cross-contamination:		
Comments				

Azalea Woods – Phase 3 Sanitary Sewer Narrative

Phase 3 of the Azalea Woods subdivision will contain 60 single family lots. The residential lots will be served by a gravity collection system which will discharge into a proposed Artesian Pump Station. The pump station constructed as part of Phase 3 will also collect gravity sewer from future phases. The pump station will discharge via a 6" force main which will tie into an existing Artesian force main located in Phase 2 of the subdivision. The gravity and force main system will be owned and maintained by Artesian Wastewater. The system has been designed per Artesian standards.



OVER 100 YEARS OF SUPERIOR SERVICE

Artesian Water Company ▲ Artesian Wastewater Management ▲ Artesian Utility Development ▲ Artesian Water Pennsylvania
Artesian Water Maryland ▲ Artesian Wastewater Maryland ▲ Artesian Consulting Engineers

April 25, 2024

Ms. Hollis Bartkovich
Solutions IPEM
3003 Merritt Mill Road
Salisbury, Maryland 21804

RE: Azalea Woods Phase 3 Ability to Serve and Construction Plan Approval Letter

Dear Ms. Bartkovich:

With reference to your request concerning water and wastewater service to Azalea Woods Phase 3 Project on Gravel Hill Road, Georgetown Hundred, Sussex County, Delaware known as Tax Parcel 135-11.00-49.00 (the "Property"), please be advised as follows:

Subject to the following conditions, Artesian Water Company, Inc. and Artesian Wastewater Management, Inc. (collectively, "Artesian") are willing and able to provide Service to the Property that meets all applicable State of Delaware, Delaware Department of Natural Resources and Environmental Control, and Sussex County standards. Artesian has existing water and wastewater Certificates of Public Convenience and Necessity ("CPCNs") from the Delaware Public Service Commission.

Based on current conditions and subject to the development entity and Artesian entering Water and Wastewater Service Agreements (collectively, "Agreements") that addresses the financial terms of the provision of Service for the Property, in accordance with Artesian's tariff as approved by the Delaware Public Service Commission, Artesian is willing and able to provide the required Service for this Property.

Furthermore, we have reviewed and approved the Water Plans prepared by Solutions IPEM dated October 20, 2023 last revised January 17, 2024. We have reviewed and approved the Sanitary Sewer, Pump Station and Forcemain Plans prepared by Solutions IPEM dated October 20, 2023 last revised April 11, 2024.

This letter shall expire if Agreements are not executed within one year of the date of this letter.

If you have any questions, please do not hesitate to contact us.

Yours very truly,

Katherine E. Garrison

Katherine E. Garrison
Senior Planning Designer

PLANNING & ZONING COMMISSION

ROBERT C. WHEATLEY, CHAIRMAN
KIM HOEY STEVENSON, VICE-CHAIRMAN
R. KELLER HOPKINS
J. BRUCE MEARS
HOLLY J. WINGATE



Sussex County

DELAWARE
SUSSEXCOUNTYDE.GOV
302-855-7878 T
302-854-5079 F
JANELLE CORNWELL, AICP
DIRECTOR

December 31, 2019

By email to: jpalkewicz@solutionsipem.com

Mr. Jason Palkewicz, P.E.
Solutions IPEM, LLC
303 North Bedford Street
Georgetown, DE, 19947

RE: Notice of Decision Letter for the Preliminary Subdivision Plan for Azalea Woods (2019-8) for the creation of a major cluster subdivision to include 610 single-family lots on a total of 316.02 acres of land and located between Shingle Point Road (S.C.R. 249) and Gravel Hill Road (S.C.R. 248) north of Route 9.

Tax Parcels: 135-11.00-32.04, a portion of 48.00, 49.00 & 56.00

Dear Mr. Palkewicz,

At their meeting of **Thursday, December 19, 2019** the Planning & Zoning Commission **approved** the **Preliminary Subdivision Plan for Azalea Woods (2019-8)** for the creation of a standard subdivision to include 610 single-family lots on a total of 316.02 acres of land and located between Shingle Point Road (S.C.R. 249) and Gravel Hill Road (S.C.R. 248) north of Route 9. The parcels are zoned Agricultural Residential (AR-1) with a small portion of parcel 32.04 being zoned General Commercial (C-1).

The Preliminary Subdivision Plan is valid for three (3) years from the date of Planning Commission decision. A Final Subdivision Plan shall be approved within three (3) years of the date of approval of the Preliminary Plan or the action of the Planning Commission shall be deemed canceled. Unless an extension is granted, approval shall be rendered null and void if substantial construction is not commenced within five (5) years of the date of recordation of the final plat.

As part of their motion, the Planning Commission acted to approve the development subject to the following conditions (which shall be clearly annotated on the Revised Preliminary and Final Subdivision Plans):

- A. There shall be no more than 610 lots within the subdivision.
- B. The Final Site Plan shall confirm that at least 51% of the site remains as open space.
- C. So that road construction proceeds reasonably on pace with road improvements, there shall be no more than 70 building permits issued in any one calendar year.
- D. The developers shall establish a homeowner's association responsible for the maintenance of streets, roads, buffers, stormwater management facilities and other common areas.



COUNTY ADMINISTRATIVE OFFICES
2 THE CIRCLE | PO BOX 417
GEORGETOWN, DELAWARE 19947

- E. The stormwater management system shall meet or exceed the requirements of the State and County. The Final Site Plan shall contain the approval of the Sussex Conservation District for the design and location of all stormwater management areas and erosion and sedimentation control facilities.
- F. As stated by the applicant, there shall be a forested or landscaped buffer of at least 30 feet in depth along the entire perimeter of the project. This may include existing forest. The Final Site Plan shall contain a landscape plan for all these areas. In addition to the forested or landscape buffer all lots shall be at least 50 feet from the perimeter boundary of the development.
- G. There were concerns expressed during the hearings about marking the common boundaries of this development and adjacent properties, particularly in the wooded areas where the boundary line may not be evident. The developer shall post permanent markers along the boundary within the forested areas that are being maintained in the development so that residents of the development are deterred from trespassing on adjacent properties. The location and type of these markers shall be shown on the Final Site Plan.
- H. As stated by the applicant, there shall be a buffer of at least 50 feet from all wetlands. The existing forest within these buffer areas shall be maintained and it shall be located on the landscape plan.
- I. The development shall comply with all DelDOT entrance and roadway improvement requirements.
- J. As proffered by the applicant, sidewalks shall be installed on both sides of all internal streets. A system of fully-shielded and downward-screened street lighting shall also be provided.
- K. The subdivision shall be served by a central sewer system.
- L. The subdivision shall be served by a publicly-regulated central water system providing drinking water and fire protection.
- M. Street design shall meet or exceed Sussex County standards.
- N. Road naming and addressing shall be subject to the review and approval of the Sussex County Mapping and Addressing Department.
- O. Construction site work and deliveries shall occur on the site between the hours of 8AM-7PM, Monday through Friday and 8AM-2PM on Saturdays.
- P. The applicant shall coordinate with the local school district regarding the location of a covered school bus stop within the subdivision. If required by the school district, the location of the bus stop area shall be shown on the Final Site Plan.
- Q. The development shall be served by its own on-site amenities including a pool, clubhouse, pickleball courts, gathering areas and tot lots.
- R. All amenities shall be completed and open for use prior to the issuance of the 250th residential building permit.
- S. The Final Site Plan shall depict all forested areas that will be preserved in addition to the forested areas and the buffers.
- T. A Revised Preliminary Site Plan, either depicting or noting these Conditions must be submitted to the Office of Planning and Zoning.
- U. The Final Site Plan shall be subject to the review and approval of the Planning and Zoning Commission.

The Final Subdivision Plan must comply with the County's Subdivision Code, including submission of agency approval letters to the Planning and Zoning Office. The agency approvals required for Final Subdivision Plan approval include but are not limited to: the Sussex Conservation District, Office of the State Fire Marshal, Sussex County Engineering Department, Sussex County Mapping and Addressing Department, Office of Drinking Water (Public Health) and the Delaware Department of Transportation (DelDOT).

Once all agency approvals have been obtained, please submit a minimum of **one (1) full-size (24 "x36")** and **one (1) electronic PDF copy** of a Final Site Plan to the Planning and Zoning Office for consideration on the next agenda for Planning Commission. It is recommended that **two (2) copies** of a check print are first submitted to staff for review.

Please note that a \$10.00 per lot fee will be required to be paid prior to the approval of any Final Subdivision Plan. For 610 lots, the fee is \$6,100.00.

Please feel free to contact me during business hours with any question from 8:30 AM – 4:30 PM, Monday through Friday, at 302-855-7878.

Sincerely,



Ms. Lauren DeVore
Planner III

RECEIPT

April 30, 2024

44

RCVD FROM Azalea Woods, LLC \$825.00

Eight Hundred twenty-five dollars and 00/100 DOLLARS

FOR Plan review fee WPCC 3030/24 Azalea Woods Phase 3

ACCT	\$	825.00
PAYMENT	\$	825.00
	\$	-

<input checked="" type="checkbox"/>	CHECK #	2179
<input type="checkbox"/>	CASH	
<input type="checkbox"/>	OTHER	BY <u>Kevin Bronson</u>

DNREC, Surface Water Discharges Section, 89 Kings Hwy, Dover, DE 19901

RECEIPT

April 30, 2024

45

RCVD FROM Azalea Woods, LLC \$300.00

Three Hundred Dollars and 00/100 DOLLARS

FOR WPCC Legal Notice Reimbursement 3030/24

ACCT	\$	300.00
PAYMENT	\$	300.00
	\$	-

<input checked="" type="checkbox"/>	CHECK #	2180
<input type="checkbox"/>	CASH	
<input type="checkbox"/>	OTHER	BY <u>Kevin Bronson</u>

DNREC, Surface Water Discharges Section, 89 Kings Hwy, Dover, DE 19901